



American Water Works Association

Dedicated to Safe Drinking Water

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May 6, 2002

Acting Secretary, William F. Caton
Office of the Secretary
Federal Communications Commission
445 12th St., S.W.
Washington, DC 20554

RE: Improving Public Safety Communications in the 800 MHz Band and Consolidating
the 900 MHz Industrial / Land Transportation and Business Pool Channels (WT
Docket No. 02-55)

Dear Secretary Caton:

On April 5, 2002, the Federal Communications Commission (FCC) published a Notice of Proposed Rule Making (NPRM) entitled Improving Public Safety Communications in the 800 MHz Band and Consolidating the 900 MHz Industrial / Land Transportation and Business Pool Channels. Copies of the American Water Works Association's (AWWA) comments on this proposal are attached. AWWA is also a member of UTC and the Critical Infrastructure Communications Coalition. AWWA supports the comments submitted by UTC on this NPRM as they are consistent with AWWA's member's own views and experience.

Please contact me, or Steve Via at (202) 628-8303 if you would like to discuss these comments.

Best regards,

// Signed 6 May 2002 //

Thomas W. Curtis
Deputy Executive Director

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

**Improving Public Safety Communications in
the 800 MHz Band and Consolidating the
900 MHz Industrial / Land Transportation
and Business Pool Channels**

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WT Docket No. 02-55

To: The Commission

COMMENT

American Water Works Association
Thomas W. Curtis
Deputy Executive Director
1401 New York Avenue, N.W., Suite 640
Washington D.C. 20005

Dated: 6 May 2002

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COMMENTS OF THE AMERICAN WATER WORKS ASSOCIATION

Introduction

The American Water Works Association (AWWA) is an international, nonprofit, scientific and educational society dedicated to the improvement of drinking water quality and supply. Founded in 1881, the Association is the largest organization of water supply professionals in the world. Our 57,000 plus members represent the full spectrum of the drinking water community: treatment plant operators and managers, environmentalists, scientists, academicians, and others who hold an interest in water supply and public health. Our membership includes approximately 4,300 water systems that supply water to roughly 80 percent of the people in the nation.

AWWA's utility members rely on wireless, internal communication systems to operate effectively and efficiently and to ensure the public's health and safety by providing drinking water that meets or surpasses federal drinking water quality standards and by providing water for fire suppression, sanitation, and commerce. Some of AWWA's members are licensees within the Business, Industrial & Land Transportation, and Public Safety allocations in the 800 MHz band.

AWWA has commented previously to the Agency on the lack of available spectrum for critical voice and data systems used by drinking water suppliers, the critical infrastructure in ensuring public safety, and interference affecting critical infrastructure systems.

Public Safety Spectrum

This NPRM both encourages and deeply concerns AWWA's members. AWWA supports the FCC's interest, as expressed in this NPRM, to look at spectrum as a resource that must be managed. The NPRM includes strong policy values, for example recognizing that it is critical to ensure the proper function of public safety radio systems¹ over other policy objectives like the identification of spectrum that can be sold to generate revenues or the convenience of communication firms that seek to profit from their use of spectrum. AWWA supports this recognition.

¹ NPRM, Page 2.

Band Restructuring

While AWWA agrees with the FCC's tentative conclusion that there is interference in the 800 MHz band that necessitates resolution, AWWA is concerned that the NPRM and the policy discussion around it has failed to address the central issue identified both by the FCC and the Nextel White Paper, the fact that Nextel is causing interference. As the responsible party, per existing Part 90 regulations, Nextel has a duty to resolve the interference it is causing. If it is unable to operate within the technical limitations of the current spectrum allotment without causing interference, then it has a responsibility to either:

1. Compensate and relocate the systems it is impacting or
2. Cease operations where it is causing interference.

Based on Nextel's own comments it is our belief that technical modifications can be used to eliminate the vast majority of the interference Nextel is causing. Immediate steps should be taken by Nextel to correct the interference situations identified.

AWWA is concerned that the principle discussion surrounding "solving" the interference problem Nextel is causing, has focused on re-arranging spectrum used by thousands of licensees to solve a problem created by poor technical judgements made by a single licensee. Nextel is the offending party and as such should solve the problems it is generating at its own cost within the bounds of the existing rules governing the relevant bands.

AWWA is opposed to restructuring the 800 MHz band at this time. Restructuring will disrupt many more systems than those that are currently impacted by interference. There are technical solutions that Nextel can use to eliminate interference. If there are areas where interference is resulting from multiple licensees, such as in the interleaved 25 MHz channels between 809.75 and 861 MHz, the FCC should initiate an open technical dialogue with equipment manufacturers, licensees, and spectrum coordinators to arrive at practical means of enhancing current technical standards.

Any restructuring of the band will take time, but resolution of interference is needed immediately suggesting that timely technical solutions pose a more effective means of reducing not only implementation burden but also, the time required to achieve resolution.. Also, without designation of a pool of spectrum outside the band for relocation, many systems would find

themselves moving multiple times to achieve the final band plan. Such a process would be disruptive and confusing and ultimately reward licensees and coordinators whose actions are the reason for the interference currently experienced.

If the FCC were to prepare an alternative band plan, AWWA strongly recommends that such an action observe the following principles:

1. Protection of public safety and critical infrastructure applications from interference.
2. Implementation of the Budget Act of 1997 provisions (e.g., such realignment must be accompanied by the same protection of band exclusivity and protection from auctions as those currently occupied by critical infrastructure entities).
3. Incorporate sound technical and financial barriers to future interference including ground level power limitations,
4. Carve guard bands from currently designated SMR and Cellular portions of the band.
5. Ensure that relocation costs are borne by the offending party.
6. Maintain contiguous regions within the band for public safety and private internal communication systems operated by critical infrastructure agencies.
7. Clearly identify equivalent and fair management strategies above Line 1 and 2.

WT Docket No. 99-87

Inclusion for the record in the WT Docket No. 99-87 in this NPRM was appropriate².

The principle comment made by AWWA in commenting on WT 99-87 is best summarized by the following excerpt:

The Balanced Budget Act of 1997 and associated report language provide clear legislative direction to the FCC to insure that “public safety radio services” as defined in the Act and report language are exempt from auction. In determining that there was a specific need for access to spectrum outside of the auction process, Congress implicitly recognized the need for adequate availability of spectrum to activities deemed “public safety radio services.” And, that that spectrum should be made available to these activities through a mechanism other than auctions.³

Providing meaningful spectrum allocation to “public safety radio services” as defined by the Balanced Budget Act of 1997 and associated report language is central to the current NPRM and AWWA reiterates its previously stated position. Any revisions to management of the 800 MHz band resulting from the NPRM should provide adequate spectrum that is available and of

² NPRM, Page 3.

equivalent utility (i.e., similar or better propagation properties and other technical limitations) to public safety and critical infrastructure radio systems currently operating in this band.

In WT 99-87 AWWA noted that:

*“Drinking water utilities are public safety service entities that serve individual communities of with specific geographic and jurisdictional boundaries. As a local service provider, drinking water utilities are managed by local government and state regulatory agencies, which control both the scope of their activities and supporting rate structures.”*⁴

The unique geographic coverage of the utility users effected by the current NPRM represents a significant complication to band restructuring, as equivalent coverage may not be available, and relocation to alternative frequencies may necessitate multiple relocations with associated costs and interruptions.

In commenting in 1999 AWWA also supported the concept of a Public Safety Radio Service Pool that would include would include appropriate critical infrastructure radio systems within the public safety radio services exemption as identified by the Balanced Budget Act of 1997. While such a construct may or may not be practical in the 800 MHz, stranding existing critical infrastructure radio systems as allowable secondary users in bands that principally allocated to otherwise incompatible user groups is not a technically sound spectrum management decision. Nor would it be compatible with the basic premise of the 1997 Balanced Budget Act language, which intends for such systems to be afforded increased consideration in spectrum management. AWWA would re-emphasize in the current docket that, the 1997 Balanced Budget Act calls for:

1. Absolute protection for critical infrastructure entities; and
2. Sheltering spectrum allocations to critical infrastructure entities from all auction activity (both with respect to the present realignment discussion and, as well, in connection with any relocation that may ultimately be authorized or required).

Accomplishing both of these objectives requires recognition by FCC that critical infrastructure entities currently operate on crowded FCC licensed facilities and, further, that critical infrastructure entities in most major urban markets operate at or near fully loaded capacities.

³ AWWA Comments to WT Docket 99-87, Revised Competitive Bidding Authority, August 2, 1999

⁴ AWWA Comments to WT Docket 99-87, Revised Competitive Bidding Authority, August 2, 1999

Recommendations

In summary AWWA recommends that the FCC take the following steps to alleviate interference in the 800 MHz band:

1. Provide adequate legal support and policy pressure to ensure that Nextel and other licensees that are currently operating in the 800 MHz band and causing interference to Public Safety licensees and other users cease causing such interference immediately through technical means or financial solutions.
2. Provide clear guidance to relevant spectrum coordinators as to their duties and priorities in the assignment of channels, such that sound, technically valid applications for licenses are processed in a timely fashion, interference is avoided where possible, and appropriate deference is given to protection of public safety and other priority users.
3. Any revisions to management of the 800 MHz band resulting from the NPRM should provide adequate spectrum that is available and of equivalent to public safety and critical infrastructure radio systems currently operating in this band within the parameters set forth under the 1997 Balanced Budget Act.
4. Where interference is likely to increase over time, due to the nature of the radio systems operating in the band, FCC should initiate an open technical dialogue to identify technical solutions to interference. Such a dialogue should not only include spectrum coordinators, but also existing licensees (or their representatives) and equipment manufacturers.
5. If after the above recommendations are undertaken and interference continues to be a significant constraint on operation in the 800 MHz band then initiate development of an alternative spectrum allocation plan that would follow the principles noted in AWWA's comments as well as sound technical considerations.